

HOE 90/P 333B (139-1590)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

..... : PARENT BEFORE
ANDREAS WINTER ET AL

..... : ART UNIT: 1505
SERIAL NO: 08/324,260

..... : EXAMINER: WL
FILED: OCTOBER 17, 1994
.....
FOR: METALLOCENES CONTAINING LIGANDS OF:
2-SUBSTITUTED IDENYL DERIVATIVES,
PROCESS FOR THEIR PREPARATION AND :
THEIR USE AS CATALYSTS

REISSUE OF U.S. PATENT NO.: 5,276,208 : *Diane C. Pickering*
.....
Hon. Commissioner of Patents & Trademarks *Diane C. Pickering*
Washington, D.C. 20231

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE
UNITED STATES POSTAL SERVICE AS FIRST-CLASS MAIL IN AN ENVELOPE ADDRESSED
TO: COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON D.C. 20231 ON THIS
DAY OF January 1995.

BY:

REISSUE APPLICATION DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that: My residence, post office address and citizenship are as stated below next to my name, I believe I am an original, first and joint inventor of the subject matter which is described and claimed in United States letters patent number 5,276,208, granted on January 4, 1994, as amended in the above-identified reissue application, and for which invention I solicit a reissue patent.

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the specification of the above-identified reissue application, including the claims.

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I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a), and in compliance with this duty, information disclosure statements will be submitted, if appropriate. 37 CFR 1.97.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of application no. P 40 35 884.4, filed in Germany on November 12, 1990.

STATEMENT OF INOPERATIVENESS OF ORIGINAL PATENT

The original patent, No. 5,276,208, issued January 4, 1994 (hereafter referred to as "the Patent") is partially inoperative because it claims less than the applicants and their assignee (hereafter referred to as "Hoechst") had a right to claim. The attorneys of record and Hoechst's attorneys, in the original application and during the prosecution of the Patent, neither contemplated nor presented additional generic claims along the lines of claims 16 and 18 of this reissue application, nor did they ever amend or propose to amend claim 1 in the manner set forth in the enclosed reissue application, and their failure to present such claims or such an amendment was an error which occurred because of a belief that a companion case (German application P 40 35 886.0, filed

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November 12, 1990 and the corresponding U.S. case, Serial No. 07/960,249, a continuation of Serial No. 07/789,341, filed November 8, 1991, now U.S. Patent 5,243,001) directed primarily to the method of using metallocene catalyst components within the scope of instant generic claim 16 would provide adequate protection for these metallocenes, reinforced by a belief that several later-filed applications would make up for any possible deficiencies in the coverage provided by the aforementioned companion case, U.S. Patent 5,243,001. This mistake first arose when the priority document, German application P 40 35 884.4, ("German application '884.4"), and the companion priority document, P 40 35 886.0 ("German application '886.0") were filed on November 12, 1990.

Relevant Facts

As indicated above, the error occurred on November 12, 1990, when the German applications '884.4 and '886.0 were filed; the error was repeated on November 8, 1991, when the original U.S. application (Serial No. 07/789,361) which matured into the Patent was filed; the error was repeated again when the Patent was allowed to issue on January 4, 1994; and the error was not discovered until after the Patent was granted.

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German application '884.4 was filed in the German Patent Office with five claims; claims 1 to 3 were directed to the compound of Formula I (essentially the same as the compound of Formula I of the Patent), claim 4 was directed to a process for the preparation of a compound of Formula I, and claim 5 was directed to the "use" of a compound of Formula I as a catalyst in the polymerization of an olefin. This priority document disclosed, but did not claim, intermediates in the preparation of compounds of Formula I. Those intermediates include metallocenes having indenyl ligands substituted on the 5-member fused ring and also ligands substituted on both the 5-member fused ring and the 6-member fused ring. Papers such as the German priority document should be of record in the file of the Patent, hence further copies are not being submitted in support of this Declaration, but such further copies can be provided on request.

The aforementioned companion priority document, German application P '886.0, discloses and claims a process for the preparation of polyolefins with the aid of a metallocene catalyst component having substituted indenyl ligands, but these ligands are said to be substituted on the 5-member fused ring of the indenyl group; no mention is made of substituents on the 6-member fused ring. Accordingly, although it was not fully appreciated at the time, the priority document, German application '884.4, had a broader

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disclosure of metallocenes with indenyl ligands than did the companion priority document. U.S. Patent 5,243,001 discloses the same indenyl ligands as German application P 40 35 886.0.

On October 10, 1991, an executed final draft of the U.S. application which matured into the Patent was mailed to the attorneys of record. The original claims of this executed final draft were, in substance, a translation of the claims of the German priority document, except for the revision of claim dependency relationships and the like.

The executed final draft of the U.S. application was reviewed by one of the attorneys of record for compliance with U.S. law and practice, and as a result a Preliminary Amendment was submitted to the PTO on December 11, 1991 and was received in the PTO on December 13, 1991. The purpose of this Preliminary Amendment was to (a) add more claims dependent from claim 1 (but only one minor change was made in claim 1), (b) make editorial changes in the existing claims (e.g. changing "may be" to --is optionally-- in claim 1), and (c) redraft "use" claim 5 as "composition" claim 8. Thus, despite his review of the original U.S. claims, the U.S. attorney of record did not seek guidance from Hoechst regarding the patentability of the intermediates produced during the synthesis of compounds of Formula I, and the

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Preliminary Amendment filed in the U.S. application did not include any "compound" claims directed to any intermediate produced in the synthesis of a compound of Formula I. In other words, the possibility of adding claims based on the disclosure of these intermediates was simply overlooked.

The other later-filed U.S. applications of Hoechst relating to metallocene catalyst components having substituted indenyl ligands, wherein these substituted indenyl ligands are said to have substituents on both the 5-member and 6-member fused rings, include: U.S. Serial No. 07/960,893 (Winter *et al*), filed October 14, 1992, now U.S. Patent 5,304,614, issued April 19, 1994; U.S. Serial No. 07/980,643 (Winter *et al*), filed November 24, 1992, now U.S. Patent 5,328,969; Serial No. 07/980,992 (Rohrmann *et al*), filed November 24, 1992; U.S. Serial No. 07/980,993 (Rohrmann *et al*), filed November 24, 1992; U.S. Serial No. 08/101,408 (Winter *et al*), filed August 3, 1993; and U.S. Serial No. 08/312,728 (Winter *et al*), filed September 27, 1994.

In view of all of the applications and patents discussed above, including the Patent, Hoechst believed, until very recently, that the opportunities for claiming metallocene catalyst components with substituted indenyl ligands had been substantially exhausted.

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Hoechst constantly keeps its patent applications in the field of metallocene catalysts under review, beginning promptly after the German priority documents have been filed. In the case of German priority document P 40 35 884.4 (the U.S. counterpart of which is Serial No. 07/789,361, which matured in the Patent), the application and later the Patent have been constantly reviewed since shortly after the German filing date of November 12, 1990, but the reviews have generally concentrated on the scope of the claims. No attempt was made to review the disclosure of the application or the Patent for unclaimed inventions which might be patentable over the prior art and which might possibly be the subject of additional patent claims.

The application (Serial No. 07/789,361) which matured into the Patent was allowed on August 10, 1993, the issue fee timely paid, and the Patent issued on January 4, 1994. On April 26, 1994, one of the instant attorneys of record was contacted by the Central Patent Department of Hoechst. The Central Patent Department had been reviewing recent patent literature regarding metallocene catalysts components *per se*, particularly those having substituted indenyl ligands, and had decided to conduct an in-depth review of the Hoechst patents and applications related to this subject. As a result of this review, conducted jointly by the attorney of record and the Central Patent

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Department, which review took into consideration the disclosures of the Hoechst patents and applications as well as their claims, it was discovered that the Patent disclosed in generic and specific terms, but did not claim, metallocene catalyst components wherein the indenyl ligand is substituted on both the 5-member ring and the 6-member ring. This disclosure in the Patent appears to have the earliest effective filing date of all Hoechst applications and patents disclosing metallocene catalyst components having such indenyl ligand substituents. Moreover, there are no presently pending or issued claims in any of the other U.S. applications or patents of Hoechst which have the same scope as claim 1 (as amended by this reissue application) or claims 16 and 18 of this reissue application.

Conclusion

It is respectfully submitted that the failure to amend claim 1 and present claims 16 to 18, as set forth in the enclosed reissue application, during the pendency of the Patent was a mistake which was made inadvertently, without deceptive intention. The mistake occurred because important disclosure in the original application was overlooked until after the Patent issued.

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POWER OF ATTORNEY

I hereby appoint the following attorneys and or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: Albert F. Bower, Reg. No. 15,499; Rudolf E. Hutz, Reg. No. 22,397; Harold Pezzner, Reg. No. 22,112; John D. Fairchild, Reg. No. 19,756; Richard M. Beck, Reg. No. 22,580; Paul E. Crawford, Reg. No. 24,397; Thomas M. Meshbesher, Reg. No. 25,083; Robert G. McMorrow, Jr., Reg. No. 30,962; Patricia Smink Rogowski, Reg. No. 33,791; Ashley I. Pezzner, Reg. No. 35,646; William E. McShane, Reg. No. 32,707, James T. Moore, Reg. No. 35,619, all of Connolly and Hutz, P.O. Box 2207, Wilmington, Delaware 19899-2007

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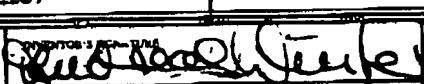
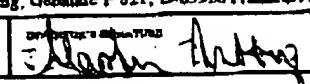
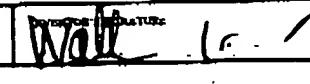
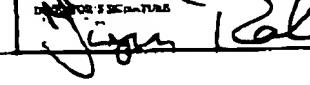
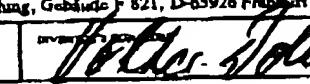
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements

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and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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